

Translation

PATENT COOPERATION TREATY

PCT/JP2003/011673



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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

02 MAY 2005

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 15-356	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2003/011673	International filing date (day/month/year) 12 September 2003 (12.09.2003)	Priority date (day/month/year) 26 November 2002 (26.11.2002)
International Patent Classification (IPC) or national classification and IPC B24B 5/04, 9/00		
Applicant MUSASHI SEIMITSU INDUSTRY CO., LTD.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 26 March 2004 (26.03.2004)	Date of completion of this report 10 December 2004 (10.12.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/011673

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages \_\_\_\_\_ 4-5, 7-12 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ 1-3, 6 \_\_\_\_\_ received by this Authority on \_\_\_\_\_ 17 September 2004 (17.09.2004)
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- pages \_\_\_\_\_ 5-8 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ 1-4 \_\_\_\_\_ received by this Authority on \_\_\_\_\_ 17 September 2004 (17.09.2004)
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- pages \_\_\_\_\_ 1-12 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/JP 03/11673

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

### 2. Citations and explanations

Document 1: JP 7-108306 A (Nippon Steel Corp.), 25 April 1995, claims, fig. 1, 4

Document 2: JP 7-24712 A (Kabushiki Kaisha Hakko), 27 January 1995, paragraphs [0009]-[0021], fig. 2

Document 3: JP 7-276197 A (Matsumoto Kokan Kabushiki Kaisha), 24 October 1995, paragraph [0032], fig. 3

#### Claims 1 to 4

Newly cited document 1 discloses a feature wherein the outer peripheral surface of a work is polished using a rotating grinding stone and a rotating brush, in that order.

Other than the mechanism for polishing using a rotating grinding stone and a rotating brush, in that order, there is no substantial difference between the inventions described in claims 1 to 4 and the invention disclosed in document 1.

However, document 2 cited in the international search report discloses a mechanism for polishing using a rotating grinding stone and a rotating brush, in that order, wherein a rotating brush that rotates in tandem

with a rotating grinding stone is mounted on one end of said rotating grinding stone.

Thus, a person skilled in the art could easily conceive of applying the mechanism disclosed in document 2 as the mechanism for polishing using a rotating grinding stone and a rotating brush, in that order, of the invention disclosed in document 1.

#### Claims 5 to 8

Document 1 does not specifically disclose a method for enlarging the diameter of a rotating brush during polishing.

Other than the point already indicated in the comments pertaining to claims 1 to 4, and again, the method for enlarging the diameter of a rotating brush, there is no substantial difference between the invention described in claims 5 to 8 and the invention disclosed in document 1.

However, document 3 cited in the international search report discloses the use of centrifugal force as a method for enlarging the diameter of a rotating brush.

Thus, a person skilled in the art could easily conceive of applying the method disclosed in document 3 as the method for enlarging the diameter of the rotating brush disclosed in document 1.